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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,941

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Tetsuro Asano

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MORRISON & FOERSTER LLP  
1650 TYSONS BOULEVARD  
SUITE 400  
MCLEAN, VA 22102

EXAMINER

JACKSON JR, JEROME

ART UNIT

PAPER NUMBER

2815

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/521,941	<b>Applicant(s)</b> ASANO ET AL.	
	<b>Examiner</b> Jerome Jackson Jr.	<b>Art Unit</b> 2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 35-96 is/are pending in the application.
- 4a) Of the above claim(s) 40-42, 60-62 and 74-83 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-39, 43-59, 63-73 and 84-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/21/05; 5/10/06; 3/9/07; 5/10/07; 8/8/8</u> .                | 6) <input type="checkbox"/> Other: _____                          |



Claims 40-42,60-62,74-83, are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/17/08.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-39 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jp 2-162744 (Simizu).

Simizu discloses in figure 6 a field effect transistor comprising source, drain and gate electrodes; “bonding pad” 6 connected to the gate electrode and a “terminal” 5 connected to the source electrode; a protecting element comprising high impurity regions 2 and 3 and insulating region 7/27 therebetween; and wherein 2 and 3 are

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disposed under terminal or bonding pad 5 and 6. Accordingly, claim 35 is anticipated or at least obvious depending on one's interpretation of "bonding pad" and "terminal".

Presently the labels "terminal" or "bonding pad" are not considered structurally distinguishing over "terminal" or "bonding pad" 5 and 6 of Simizu.

In regard to the functional language, see *In re Swinehart* 169 USPQ 226, Ex parte Minks 169 USPQ 120 and *In re Pearson* 181 USPQ 641 where it was decided that functional language, statements of intended use, or mere labels do not structurally distinguish claims over anticipating prior art.

>While features of an apparatus may be recited either structurally or functionally, claims directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. >*In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); <*In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device *is*, not what a device *does*." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

Claim 36 is also rejected as the high impurity diffusion regions 2 and 3 are disposed along the bottom side of a "bond pad" or "terminal".

Claim 37 is rejected as the impurity regions 2 and 3 can be defined as comprising a "peripheral" region.

Claim 38 is rejected as the protecting element is in a "path" from 5 to the transistor channel, for example.

Claim 39 is rejected as 5 can be labeled a "bonding pad" and 2 is a resistive region.

Claims 35-39, 43-59, 63-73 and 84-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simizu in view of Hatta 4,803,527.

Simizu discloses a protection device between the gate and source “pads” or “terminals”. Hatta discloses a similar protection device and wherein protection between the gate input and both the source and drain electrodes is practiced. See figure 9 where protection between input and ground and input and Vd is practiced. It would have been obvious from the suggestions of the prior art to practice an “additional” protection device for protection from both Vd and ground voltage spikes. Claim 43 is obvious structure. Recitations of “alongside” do not distinguish over the applied art because figure 9 shows ground diffusion region and Vd diffusion region on each side of the input pad in Hatta.

Claim 44 is rejected as there is an additional transistor in Hatta and protection for that transistor is also afforded. Multiple protection structures are obvious to one of ordinary skill for circuits comprising multiple transistors.

Claims 45-58 are obvious as the particular breakdown voltages and exact dimensions of device regions are result effective variables and there are no unexpected results over the teachings and suggestions of the applied art to one of ordinary skill.

Claim 59 is rejected as a resistor is shown in the applied art for additional protection. See figure 1, for example, of Hatta.

Claims 63-73 and 84-96 are likewise rejected as above.

Claims 35-39,43-59,63-73 and 84-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simizu ‘744 with Hatta ‘527 and further in view of Tanaka EP 0,700,161.

Simizu with Hatta as stated above and further in view of Tanaka disclosing multiple transistors. It would have been obvious to have practiced multiple protection

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devices as Simizu with Hatta for the multiple transistors of Tanaka for the express purpose of protecting both transistors from overvoltages, or for protection from spikes on both ground and Vd lines, or equivalently, from the most positive and most negative sources of voltage. Applicant's claims are obvious structures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Jackson Jr. whose telephone number is 571-272-1730. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Parker can be reached on 571-272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jerome Jackson Jr./  
Primary Examiner, Art Unit 2815